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PTO/SB/01 (12-97)  
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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

☒ Declaration Submitted with Initial Filing      OR      ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	91117 DSC
First Named Inventor	David F. Smith
<b>COMPLETE IF KNOWN</b>	
Application Number	/
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Wavelength Division Multiplexed Optical Transmission Systems, Apparatuses, and Methods

the specification of which (Title of the Invention)

☒ is attached hereto  
OR

☐ was filed on (MM/DD/YYYY) [ ] as United States Application Number or PCT International

Application Number [ ] and was amended on (MM/DD/YYYY) [ ] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.
60/108,751	11/17/1998	

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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## DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

☒ Customer Number  OR  
☐ Registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Place Customer Number Bar Code Label here

Name	Registration Number	Name	Registration Number
	021398		
PATENT TRADEMARK OFFICE			

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: ☒ Customer Number or Bar Code Label  OR ☐ Correspondence address below


Name	021398				
Address	PATENT TRADEMARK OFFICE				
Address					
City		State		ZIP	
Country		Telephone		Fax	

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle (if any))		Family Name or Surname					
David F.		Smith					
Inventor's Signature	David F. Smith		Date	11-17-99			
Residence: City	Ellicott City	State	MD	Country	USA	Citizenship	U.K.
Post Office Address							
Post Office Address	7015 Albert Einstein Dr. PO Box 9400						
City	Columbia	State	MD	ZIP	21046-9400	Country	USA

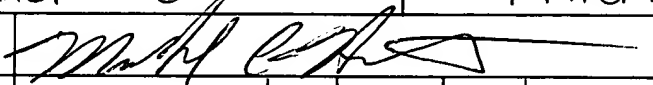
☒ Additional inventors are being named on the / supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto

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PTO/SB/02A (3-97)  
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## DECLARATION

ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
Page 1 of 1

Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle (if any))				Family Name or Surname			
Michael C.				Antone			
Inventor's Signature				Date	11-17-1999		
Residence: City	Ellicott City	State	MD	Country	USA	Citizenship	USA
Post Office Address							
7015 Albert Einstein Dr. PO Box 9460							
City	Columbia	State	MD	ZIP	21046	Country	USA
Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle (if any))				Family Name or Surname			
Inventor's Signature				Date			
Residence: City		State		Country		Citizenship	
Post Office Address							
City		State		ZIP		Country	
Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle (if any))				Family Name or Surname			
Inventor's Signature				Date			
Residence: City		State		Country		Citizenship	
Post Office Address							
City		State		ZIP		Country	

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**37 C.F.R. § 3.73(b) Statement**

Applicant: David F. Smith and Michael C. Antone  
 For: Wavelength Division Multiplexed Optical Transmission Systems, Apparatuses, and Methods  
 Serial No.: Filed:

**CORVIS Corporation (a Delaware Corporation)** is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the United States Patent and Trademark Office on \_\_\_\_ at Reel \_\_\_\_, Frame \_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application identified above to the current assignee as shown below:

1. From \_\_\_\_ To: \_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office on \_\_\_\_ at Reel \_\_\_\_, Frame \_\_\_\_, or for which a copy thereof is attached.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

**Power Of Attorney**

I hereby revoke all previous powers of attorney, if any, and appoint the attorney(s) and/or agent(s) identified with United States Patent and Trademark Office **Customer Number 021398** to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

**Please Direct All Correspondence to: Michael C. Antone, Esq.**

**Declaration**

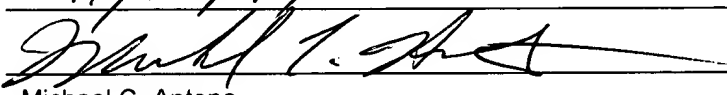
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and that further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful statements may jeopardize the validity of the application and any patent issuing therefrom.

Date

Signature

Name

Title

11/17/99  
  
 Michael C. Antone  
 Intellectual Property Counsel

**STATEMENT CLAIMING SMALL ENTITY STATUS**  
**(37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN**

Docket Number (Optional)  
981117DS

Applicant, Patentee, or Identifier: David F. Smith, Michael C. Antone

Application or Patent No.: \_\_\_\_\_

Filed or Issued: \_\_\_\_\_

Title: Wavelength Division Multiplexed Optical Transmission Systems, Apparatuses, and Methods

I hereby state that I am

☐ the owner of the small business concern identified below:

☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN CORVIS CORPORATION

ADDRESS OF SMALL BUSINESS CONCERN 7015 Albert Einstein Drive  
Columbia, MD 21046-9400

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☒ the specification filed herewith with title as listed above.  
☐ the application identified above.  
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

- Each person, concern, or organization having any rights in the invention is listed below:  
☒ no such person, concern, or organization exists.  
☐ each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING MICHAEL C. ANTONE

TITLE OF PERSON IF OTHER THAN OWNER INTELLECTUAL PROPERTY COUNCIL

ADDRESS OF PERSON SIGNING 7015 Albert Einstein Drive, Columbia, MD 21046-9400

SIGNATURE

[Signature]

DATE

11/17/99